Appendix 3: Power Calculation

Program PASS 6.0 Two-Sample T-Tests Power Analysis

Numeric Results for Two-Sample T-Test
Null Hypothesis: Mean 1=Mean 2 Alternative Hypothesis: Mean 1<>Mean 2
The sigmas were assumed to be known and equal. The N's were forced to be equal.

Power	N1	N2	Alpha	Beta	Mean1	Mean2	Sigma1	Sigma2
0.97857	250	250	0.01000	0.02143	6.25	4.25	4.86	4.86
0.99587	250	250	0.05000	0.00413	6.25	4.25	4.86	4.86
0.99844	250	250	0.10000	0.00156	6.25	4.25	4.86	4.86

Numeric Results for Two-Sample T-Test
Null Hypothesis: Mean1=Mean2 Alternative Hypothesis: Mean1<>Mean 2
The sigmas were assumed to be known and equal. The N's were forced to be equal.

Power	N1	N2	Alpha	Beta	Mean1	Mean2	Sigma1	Sigma2
0.63084	100	100	0.01000	0.36916	6.25	4.25	4.86	4.86
0.82893	100	100	0.05000	0.17107	6.25	4.25	4.86	4.86
0.89708	100	100	0.10000	0.10292	6.25	4.25	4.86	4.86

Reference: Statistical Methods for Rates and Proportions, Second Edition; Joseph L. Fleiss